EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 2-21

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-10-060	11/30/2010 To 07/31/2013 Base Option Period Number 2	Cont. Of Con Analysis Support

Contractor: COMPUTER SCIENCES CORPORATION

Specify Section and paragraph of Contract SOW: 2.8, 2.15, 2.17, 3.1.4, 3.1.5, 3.1,17

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 08/01/2012 To 07/31/2013

Comments:
This action establishes work assignment 2-21 in OP 2 and requests a work plan, staffing plan, and budget to support the attached PWS. The Agency estimates 2070 direct labor hours will be necessary for the requirement.

☐ Superfund — Accounting and Appropriations Data — [X] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee:	LOE:
11/30/2010 To 07/31/2013		0
This Action:		2,070
Total:		2,070

Work Plan / Cost Estimate Approvals

	Cost/Fee:	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Leanne Stahl (Signature) (Date)	Branch/Mail Code: Phone Number: 202-566-0404 FAX Number:
Project Officer Name: Nancy Muzzy (Signature) (Date)	Branch/Mail Code: Phone Number: 513-569-7864 FAX Number:
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Contracting Official Name: Cathy Basu (Signature) (Date)	Branch/Mail Code: Phone Number: 513-487-2042 FAX Number:

WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT

Contract No. EP-C-10-060
Work Assignment: 2-21
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LOE: 2070 hours

Period of Performance: August 1, 2012 to July 31, 2013

Title: Contaminant of Concern Analysis Support for Water Quality and Security Assessment

PWS Sections: 2.8, 2.8.1, 2.8.3., 2.8.4, 2.15, 2.16, 2.17, 3.1.4, 3.1.5, 3.1.13, 3.1.17, 3.1.18

I. PURPOSE:

The purpose of this work assignment is to provide scientific, technical, quality assurance (QA), and logistics support to the Office of Water's Office of Science and Technology (OST) to detect and identify threats to national water resources and human health by supporting surveillance monitoring of contaminants of concern for surface waters throughout the United States, focusing on rivers and the Great Lakes. To achieve this purpose, the contractor shall be expected to secure, coordinate, and monitor laboratory services for analysis of fish tissue samples for ongoing projects; complete QA review of the analytical data received from multiple laboratories; develop and maintain project-specific databases containing the analytical and related field data; prepare and review files for statistical analysis of analytical data; review and provide support for development of reports and outreach materials related to the analysis of fish tissue (and related water quality samples, if applicable) for contaminants of concern; and provide technical support for a variety of other activities related to surveillance monitoring for contaminants of concern. These projects support programmatic support needs related to our national all hazards homeland security responsibilities by providing the first statistically representative toxic chemical baseline data for U.S. rivers and for the Great Lakes to evaluate the effectiveness of policies, programs,

and tools to protect and enhance the quality and security of water resources in rivers and the Great Lakes related to human health. This work assignment also contributes to the commitments made in EPA's *Strategic Plan: 2011 to 2015*, which references Goal 2 (Clean and Safe Water), Objective 2.1 (Protecting Human Health), Sub-objective 2.1.1 (Water Safe to Drink).

II. BACKGROUND:

OST within EPA's Office of Water conducts studies that identify and assess the levels of chemical threats to surface water quality and human health in U.S. waters. Using fish tissue as an indicator of water quality or measuring water quality directly, OST is currently conducting studies of toxic chemicals in U.S. rivers and in the Great Lakes. The national rivers study is called the National Rivers and Streams Assessment or NRSA. It includes monitoring fish tissue and at both urban (about 165) and non-urban (over 400) river segments for contaminants of concern (e.g., mercury, selenium, polychlorinated biphenyls or PCBs, polybrominated diphenyl ethers or PBDEs, and pesticides). It also includes assessment of the threat of emerging contaminants of concern in fish tissue and ambient surface water samples collected at approximately 165 urban river segments (e.g., pharmaceuticals and perfluorinated compounds or PFCs for water samples and musks and PFCs for fish samples). The Great Lakes study is called the Great Lakes Human Health Fish Tissue Study (GLHHFTS). It includes surveillance monitoring of fish tissue for contaminants of concern (e.g., mercury, PCBs, and PBDEs) and assessment of the threat of emerging contaminants of concern in fish tissue (e.g., PFCs), along with assessment of beneficial chemicals to offset risks for human consumption of fish (e.g., omega-3 fatty acids). Both studies involve analysis of fish fillet tissue to generate data applicable to human health. The NRSA and GLHHFTS are critical efforts that will provide the first statistically based data on toxic chemicals related to human health in surface waters and fish from U.S. rivers and in fish from the Great Lakes. Results from these studies will also establish baselines for assessing threats to the quality and security of national rivers and Great Lakes water resources, including the safety of drinking water plant source waters and human consumption of fish. This work assignment will focus on support for surveillance monitoring of contaminants of concern in fish tissue samples from U.S. rivers and the Great Lakes and for reporting monitoring results from both studies.

Prior to August 2012, OST conducted a national study that involved surveillance monitoring for contaminants of concern in fish tissue from U.S. lakes (excluding the Great Lakes) and a pilot study that involved assessment of the threat of emerging contaminants of concern in fish tissue from urban effluent-dominated streams near (just downstream of) sewage treatment plant (STP) discharges. The lakes study is called the National Study of Chemical Residues in Lake Fish Tissue or the National Lakes Fish Tissue Study (NLFTS). It included surveillance monitoring of mercury, arsenic, PCBs, dioxins and furans, pesticides, PBDEs, and semivolatile organic compounds (e.g., chlorobenzenes, phenols, and polycyclic aromatic hydrocarbons or PAHs) at a statistically representative set of 500 lakes and reservoirs in the lower 48 states. The pilot study is called the Pilot Study of Pharmaceuticals and Personal Care Products (PPCPs) in Fish Tissue or the PPCP Fish Pilot Study. It involved assessment of the threat of pharmaceutical and personal care product chemicals in fish tissue from five urban streams near STP discharges in

Chicago, Dallas, Orlando, Phoenix, and West Chester (a suburb of Philadelphia) and from a reference site in the Gila River (East Fork) within the Gila Wilderness Area in southwest New Mexico. Support for these studies under this work assignment will focus on maintenance of project-specific databases, response to NLFTS and PPCP Fish Pilot Study data requests, and preparation of final disposition and storage of project records and sample archives.

IIII. QA REQUIREMENTS:

Tasks 1-4 in this work assignment require the use of primary and/or secondary data. Collection, use, and analysis of data will be identical to the procedures described in the project-specific quality assurance project plans (PQAPPs) completed and/or applied under WA 1-21, consistent with the Agency's quality assurance (QA) requirements. Work on these tasks cannot proceed until the contractor receives notification from the PO via e-mail that utilization of the PQAPP completed and/or applied under WA 1-21 has been approved for use on these tasks. The project-specific quality assurance requirements (PQAPP) must be addressed in the monthly progress reports as specified under Task 0, below. The applicable PQAPPs are listed below for clarification.

National Rivers and Streams Assessment

- For PFCs: *Quality Assurance Project Plan for Laboratory Sample Preparation and Analysis Activities: Perfluorinated Compounds (PFCs) in Water and Fish Tissue from the National Urban River Contaminant of Emerging Concern (CEC) Study* (referred to as the NRSA urban river analytical activities QAPP)
- For all other chemicals: *Quality Assurance Project Plan for Chemical Analyses for the National Rivers and Streams Assessment Fish Tissue and Urban River Surface Water Samples Performed by ORD's National Exposure Research Lab* (referred to as the NRSA analytical activities QAPP)

Great Lakes Human Health Fish Tissue Study

- *Quality Assurance Project Plan for Fish Sample Preparation and Analysis of Mercury, Perfluorinated Compounds (PFCs), Polybrominated Diphenyl Ethers (PBDEs), Polychlorinated Biphenyls (PCBs), and Fatty Acids in Fish Tissue from the Great Lakes Human Health Fish Tissue Study, Revision 2* (referred to as the GLHHFTS analytical activities QAPP)

National Lake Fish Tissue Study

- *Quality Assurance Project Plan for Analytical Control and Assessment Activities in the Nation Study of Chemical Residues in Lake Fish Tissue* (referred to as the NLFTS analytical activities QAPP)

PPCP Fish Pilot Study

- *Quality Assurance Project Plan for Laboratory Sample Preparation and Analysis Activities in the National Pilot Study of Pharmaceuticals and Personal Care Products (PPCPs) in Fish Tissue* (referred to as the PPCP Fish Pilot Study analytical activities

QAPP)

IV. DETAILED TASK DESCRIPTION:

All direction under this work assignment will be provided as written technical direction from the Task Manager or Work Assignment Manager, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Project Officer and the Contracting Officer, and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA Work Assignment Manager (WAM) and EPA Project Officer (PO) in draft form for review and comment. The contractor shall incorporate WAM/Task Manager review comments into revisions of the drafts. All drafts and final reports shall be approved by the WAM.

The contractor shall perform the following tasks:

Task 0: Work Plan, Progress Evaluations, and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the metropolitan DC area, the contractor shall include information on plans to manage work and contract costs. The work plan shall also provide an analysis of the existing and projected constraints, and the feasibility of accomplishing the project's purpose.

In addition, the contractor shall either prepare a project-specific quality assurance plan (PQAPP) (noted above), or use a previously prepared one as specified above, and ensure the quality of secondary data used to complete these tasks. If using the previously prepared plan (or plans), the contractor shall prepare a statement indicating that this WA is a continuation of WA 1-21. The workplan shall explain that collection, use, and analysis of data in this work assignment will be identical to the procedures described in the PQAPP completed and/or applied under WA 1-21. If issuing a new work assignment, with new PQAPP requirements, then the work plan shall explain when the PQAPP will be submitted based on the specific data requirements of the WA. When using a previously approved PQAPP, the contractor shall immediately notify the Project Officer and WA manager if any changes to the tasks involving the collection and analysis of the data occur, and prepare a new or modified PQAPP, supplementing the previous PQAPP. Work on these tasks cannot proceed until the contractor receives notification of the new PQAPP approval from the PO via e-mail. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA.

In addition, in each monthly progress report, the contractor shall, at the introduction to the discussion of this work assignment, discuss actual progress toward achieving the

purpose of this work assignment, including problems encountered, issues that may need to be resolved, and anticipated timing for completing the goals of the work assignment. The contractor shall provide an overview of contract projects, striving to implement efficiencies in performance when complimentary requirements are issued. The contractor shall assure that duplication of effort relative to other ongoing work assignments under this contract is not occurring.

Deliverables: Work plan, updates to PQAPP if necessary, and monthly progress and financial reports.

Task 1: Support for Surveillance Monitoring of Contaminants of Concern in U.S. Waters

The contractor shall provide support to characterize baseline levels of contaminants of concern in U.S. rivers and in the Great Lakes to assist EPA in identifying threats that contaminants of concern may pose to the quality and security of water resources important for human health, including quality of source waters for drinking water and level of contamination in fish species commonly consumed by humans. Support for this task will focus on analysis of fish tissue samples collected for the National Rivers and Streams Assessment (NRSA) and the Great Lakes Human Health Fish Tissue Study (GLHHFTS). The NRSA is the first statistically representative study of toxic chemical residues in water resources of U.S. rivers and the GLHHFTS is the first statistically representative study of toxic chemical residues in Great Lakes fish. Contractor support for this task will consist of a broad range of activities related to analysis of fish tissue samples for the NRSA and the GLHHFTS, including laboratory services support, data review and other QA support, database and data management support, and data analysis support. Specific activities to be performed under this task are described in sub-tasks 1.1 through 1.4.

1.1 Laboratory Services Support

The contractor shall provide ongoing technical and logistical support for planning, securing, coordinating, and monitoring laboratory services for analysis of approximately 160 GLHHFTS fillet tissue samples for multiple chemicals, including mercury, PFCs, PBDEs, and fatty acids. This is ongoing support provided initially for WA 4-10 under Contract No.EP-C-06-085 (also a CSC contract) and continued since October 2011 for WA 1-21 under this contract. The analyses include total mercury, 13 PFCs, 52 PBDE congeners and two related chemicals, and five fatty acids using analytical methods described in the GLHHFTS analytical activities QAPP. Prior support under the previous work assignments included defining laboratory requirements, preparing and distributing analytical statements of work (SOWs) to qualified laboratories, and evaluating responses to the SOWs to secure laboratory services from an experienced laboratory with demonstrated technical qualifications for each type of chemical analysis. The laboratories analyzing GLHHFTS fish tissue samples for each chemical or chemical group are identified in the GLHHFTS analytical activities QAPP. Prior support under the previous work assignments also included shipping fish tissue samples to the designated laboratories for mercury, PFC, PBDE, and fatty acid analysis. Ongoing support under this work assignment will include coordinating shipments of fish tissue samples (as applicable) for additional fatty acid analysis (or

other target chemical analyses, as necessary) to address QA questions, ensuring application of data reporting formats developed under the previous work assignment for all the GLHHFTS chemicals, maintaining continuous oversight of analytical laboratory work performance, and continuing to provide a secure and properly maintained freezer facility for long-term storage of archived fish tissue samples from OST studies.

The contractor shall coordinate shipments of Great Lakes fish tissue samples to the laboratory designated for additional fatty acid analyses or to other laboratories, as applicable, for re-analysis of samples. The contractor has access to the freezer at Microbac Laboratories in Baltimore, MD where the fish tissue samples to be analyzed are in temporary storage. The contractor shall pack the fish tissue samples following procedures described in the GLHHFTS analytical activities QAPP, prepare shipping documentation and transport coolers containing the fish tissue samples to an overnight delivery service, track the progress of fish tissue sample shipment, contact the overnight delivery service immediately to resolve any problem that develops during shipment of the samples, notify the EPA WAM within 24 hours about the problem and its resolution, confirm receipt of sample shipment with the laboratory, and report any sample condition issues to the EPA WAM within 24 hours after the laboratory has inspected the coolers.

The contractor shall ensure that the analytical laboratories apply formats developed for reporting Great Lakes fish tissue data that are consistent with requirements in the GLHHFTS analytical activities QAPP and will facilitate application of manual and automated review procedures developed for review of fish tissue data generated for the National Lake Fish Tissue Study.

The contractor shall maintain continuous oversight of laboratory work performance, tracking compliance with technical and QA requirements and adherence to the data delivery schedule. The contractor shall notify the EPA WAM within 24 hours if any problems develop with quality or timeliness of work being performed by the laboratory designated for analysis of GLHHFTS target chemicals and initiate corrective actions to address the problem. Corrective actions for quality issues are specified in the GLHHFTS analytical activities QAPP.

The contractor shall continue to provide a secure freezer facility for storing archived fish tissue samples from OST studies that meets the specifications in the existing PQAPPs for long-term storage of these samples (e.g., freezer temperature maintained at less than or equal to -20°C). A freezer at Microbac Laboratories in Baltimore, MD is the current repository for the archived fish tissue samples. It contains over 10,000 jars of NLFTS fish tissue samples, about 80 containers of PPCP Fish Pilot Study fish tissue samples, and over 900 jars of GLHHFTS fish tissue samples. The contractor shall ensure that the archived fish tissue samples are labeled according to PQAPP specifications, organize the archived samples in the freezer by project, develop project-specific inventories of archived fish tissue samples and submit electronic copies of the inventories to the EPA WAM, and manage the long-term storage of the archived samples. The archived sample inventories will identify the OST study and include information on the content and condition of each sample being stored for that study and on the location in the freezer of each sample associated with that study. The contractor shall update applicable inventories when archived fish tissue samples are removed or added to the long-term storage facility and submit revised

archived sample inventories to the EPA WAM. The contractor shall not remove any archived fish tissue samples either temporarily or permanently from the freezer without written approval from the EPA WAM. The contractor shall notify the EPA WAM via email within 24 hours of the arrival of new archived fish tissue samples from any of the analytical laboratories working on fish tissue analyses for OST studies.

Deliverables: Fish tissue sample shipments, Archived fish tissue sample inventories

1.2 Data Review and Other QA Support

The contractor shall apply manual and automated systems for qualitative and quantitative review of analytical and quality assurance/quality control (QA/QC) data generated by analytical laboratories during analysis of the NRSA fish tissue and related water quality samples and of the GLHHFTS fish tissue samples. The contractor shall review the data for completeness, accuracy, and compliance with QA/QC procedures, acceptance criteria, and reporting requirements specified in the NRSA and GLHHFTS analytical activities QAPPs, respectively. The contractor shall also validate the quality of the data by evaluating data quality and assigning flags consistent with those used for the National Lake Fish Tissue Study fish tissue data to identify results with potential quality issues. On a monthly basis, the contractor shall prepare and submit a data review progress report that includes project-specific information on receipt of data from the analytical laboratories designated for analysis of NRSA and GLHHFTS fish tissue samples for each chemical or chemical group and on status of contractor review of the data from each project. In the data review progress reports, the contractor shall also identify any analytical results with potential quality problems based on QA/QC requirements specified in the project-specific QAPPs. For estimating purposes, assume QA review of the following NRSA and GLHHFTS data sets:

- the 2008-2009 NRSA pharmaceutical data for urban water samples
- the remaining NRSA legacy organics data for urban and non-urban fish tissue samples, including data for PCBs, PBDEs, and pesticides
- the NRSA musk data for urban fish tissue samples
- the additional GLHHFTS fatty acids data for fish tissue samples

The contractor shall provide support for a number of other QA activities, including, but not limited to, the following:

- preparing revisions to update target chemical information in the NRSA and/or GLHHFTS analytical activities QAPPs (as necessary)
- compiling target chemical information to incorporate into project-specific QA reports that summarize results of the NRSA and GLHHFTS analytical data reviews, respectively, and describes qualification of any analytical results during the review process
- developing materials that describe and document the status of QA activities related to chemical analysis of NRSA water and fish tissue samples and of GLHHFTS fish tissue samples for EPA management briefings, meeting presentations, annual OST QA reports, and QA audits (if scheduled during the work assignment period of

performance)
- documenting target chemical QA information to respond to EPA requirements for development of Information Quality Guidelines.

The contractor shall prepare NRSA and GLHHFTS analytical QA reports after completion of the QA data review for each project with content and format consistent with the content and format used to present analytical and related information in the National Lake Fish Tissue Study analytical QA report unless otherwise specified by the EPA WAM. The National Lake Fish Tissue Study QA report is available online at http://water.epa.gov/scitech/swguidance/fishstudies/overview.cfm. The EPA WAM will specify format and content for development of materials to document other QA activities, as required. In addition to the development of data review monthly progress reports and the two project-specific analytical QA reports, assume the following other QA activities for estimating purposes: development of various materials documenting target chemical QA activities for OST studies of contaminants of concern for two briefings, six meeting presentations, and the annual OST QA report.

Deliverables: Data review monthly progress reports, Analytical QA reports for the NRSA and the GLHHFTS, Materials documenting analytical QA activities

1.3 Database and Data Management Support

The contractor shall provide both manual and automated systems to manage NRSA and GLHHFTS chemical data and related study information. The contractor shall utilize these systems for chemical data receipt, storage, and retrieval; development and maintenance of project-specific NRSA and GLHHFTS databases that incorporate the chemical data for the respective studies, along with related field and statistical information; sample analysis tracking; development of data files (e.g., statistical analysis files and files for entry into EPA's STORET); and preparation of computerized reports to identify errors, to provide information for management briefings or technical presentations, and to produce data summaries or graphics for a variety of applications.

The contractor shall receive and store NRSA and GLHHFTS chemical data and related study information, including historical data/information and data/information gathered during this work assignment period of performance. These data will typically be in electronic formats, but some data and study information may be delivered as hard copy. The contractor shall maintain an automated inventory of these data and related information and shall provide a secure facility to store project-specific data in an organized, retrievable manner.

The contractor shall develop and maintain project-specific databases to efficiently receive, store, manipulate, and retrieve NRSA and GLHHFTS field, laboratory, and statistical data and project information related to analysis of NRSA water and fish tissue samples and of GLHHFTS fish tissue samples for target chemicals. The contractor shall use Microsoft Access software for development of the NRSA and GLHHFTS databases and incorporate database structure, content,

and organization for the fish tissue samples consistent with the fish tissue database developed for the National Lake Fish Tissue Study. The NRSA analytical activities QAPP specifies the type of data that needs to be stored in a database for the water samples. The contractor shall also continue to maintain project-specific databases developed for the National Lake Fish Tissue Study (NLFTS) and the PPCP Fish Pilot Study and provide documentation on database structure, content, organization, and function for the four databases consistent with a user manual format. For all four project-specific databases, the contractor shall provide technical support that includes, but is not limited to, testing of functionality, integration of electronic data from multiple sources, testing for data completeness and accuracy, retrieval of data for a variety of uses (e.g., preparation of data files in a user-friendly format, such as Excel, for responses to data requests), tracking and maintenance of information, reporting of results, documentation of database structure and content, and incorporation of data security measures to maintain the integrity and security of the data.

The contractor shall provide support to respond to requests for data and related information for the NRSA, the GLHHFTS, the NLFTS, and the PPCP Fish Pilot Study. These requests will generally require quick responses within a period of one or two days. For response to requests, the contractor shall retrieve and compile data and other related information, prepare data and related information files in appropriate formats (e.g., Excel and WORD), and distribute the files as directed by the EPA WAM. For estimating purposes, assume responses to 24 data requests during the work assignment period of performance.

Deliverables: Status reports on NRSA and GLHHFTS database development, Database documentation for OST studies, Responses to data/information requests for OST studies

1.4 Data Analysis Support

The contractor shall provide support for statistical analysis of NRSA and GLHHFTS target chemical data. EPA analyzes environmental data (e.g., fish tissue and water quality data) from probability surveys (e.g., the NRSA, the GLHHFTS, and the NLFTS) using agency-developed custom programs in R statistical software. These programs generate statistical results, such as means, medians, standard deviations, percentiles, and cumulative density functions with confidence intervals. The contractor shall prepare chemical-specific and media-specific (e.g., fish tissue and water) input data files for statistical analysis of the NRSA and GLHHFTS analytical results that incorporate data for each sample type and for each chemical or chemical group from all the valid probability-based primary fish tissue and water samples (i.e., files that do not include any duplicate sample results) for the NRSA and all the valid probability-based fish tissue samples for the GLHHFTS (note that no duplicate fish samples were collected for the GLHHFTS). The EPA WAM will provide the master list of valid primary water and fish tissue samples collected and analyzed for the NRSA and the master list of valid fish tissue samples collected and analyzed for the GLHHFTS. The contractor shall also review the statistical results (i.e., the statistical output data files) for each sample type and chemical or chemical group for completeness, accuracy, and consistency with the input data file. For estimating purposes, assume preparation of the following statistical analysis input files and review of the statistical

analysis output files for the following NRSA and GLHHFTS data sets:

- NRSA pharmaceutical data for water samples (urban samples only)
- NRSA PCB data for fish tissue samples (urban and non-urban samples)
- NRSA PBDE data for fish tissue samples (urban and non-urban samples)
- NRSA pesticide data for fish tissue samples (urban and non-urban samples)
- NRSA musk data for fish tissue samples (urban samples only)
- GLHHFTS mercury data for fish tissue samples
- GLHHFTS PFC data for fish tissue samples
- GLHHFTS fatty acid data for fish tissue samples
- GLHHFTS PBDE data for fish tissue samples

The contractor shall also provide support for development of comparative analyses of probability-based NRSA, GLHHFTS, and NLFTS fish tissue data as directed by the EPA WAM. These analyses may include, but are not limited to, comparisons of detection frequencies of the target chemicals, of compound-specific or congener-specific concentration ranges (as applicable), and species-specific concentration levels among the studies for incorporation into technical reports and/or articles for publication in scientific journals. For estimating purposes, assume development of comparative analyses for three target chemicals (e.g., PFCs, PBDEs) that include compound-specific or congener-specific comparisons of detection frequencies and concentration ranges and three species-specific comparisons (e.g., largemouth bass).

Deliverables: Draft and final input files for statistical analysis of NRSA and GLHHFTS target chemical data, Statistical output file reviews, and Comparative analyses of target chemical data

Task 2: Support for Reporting Water Resource Surveillance Monitoring Study Results

The contractor shall provide support for reporting results of OST studies conducted for surveillance monitoring of contaminants of concern in national water resources, including the statistically representative NRSA and GLHHFTS fish tissue baseline data. These data will assist EPA in evaluating the effectiveness of policies, programs, and tools to protect and enhance the quality and security of water resources related to human health in U.S. rivers and the Great Lakes. Support for this task will focus on reporting results of target chemical analysis of NRSA and GLHHFTS fish tissue samples, including development of data summaries, technical reports, articles for scientific journals, and a variety of outreach materials. Specific activities to be performed under this task are described in sub-tasks 2.1 and 2.2.

2.1 Technical Document Support

The contractor shall provide support for development of technical documents to report NRSA and GLHHFTS target chemical results and compare these results to similar chemical results from related EPA studies (e.g., the National Lake Fish Tissue Study). These technical documents may include, but are not limited to, data summaries, a final technical report, and a scientific journal article for release and publication of the target chemical data. Contactor support for technical

document development may include, but is not limited to, preparation of data summaries, text, and graphics for incorporation into a technical report or scientific journal article; compilation and integration of data and related technical information from multiple sources into a technical document; and application of EPA-compatible software for document production (e.g., Microsoft WORD). The contractor shall provide a draft of all materials developed for technical documents to the EPA WAM for approval, and shall prepare the final document materials based on the WAM's comments on the draft materials. For development of technical document materials, the contractor shall comply with all the EPA requirements for production and publication of technical reports and with all the requirements for publication of articles in applicable scientific journals. The EPA WAM will provide information about agency requirements for publication of technical reports. The EPA WAM will identify journals for submission of scientific articles, and the contractor shall obtain the publication requirements for each journal and incorporate these requirements into materials for scientific article development. For technical document printing, the contractor shall provide a camera-ready copy and a disk copy (or other electronic storage media, such as a flash drive) in a format that enables the material to be uploaded onto the INTERNET.

Deliverables: Materials for development of up to 4 technical documents

2.2 Outreach Materials Support

The contractor shall provide support for development of outreach materials related to monitoring fish tissue for contaminants of concern under the NRSA, GLHHFTS, NLFTS, and PPCP Fish Pilot Study. Outreach materials may include, but are not limited to, fact sheets, posters, talking points, electronic slide shows, camera-ready copy, and website materials (e.g., layouts, text, and graphics). The materials shall be developed for use in media events (e.g., press releases), briefings, meetings, and presentations at conferences or other events. All materials shall be provided in accordance with the limitations set forth in the Section H clause titled "PRINTING (EPAAR 1552.208-70)." The contractor shall provide a draft of all materials for approval by the EPA WAM, and shall prepare the final materials based on the WAM's comments on the draft materials. For development of outreach materials, the contractor shall be able to translate complex scientific information into simplified, accurate public communication information, and shall also have the capability to conduct mass mailings and mass e-mail distributions as specified by the EPA WAM in technical direction. For print products, the contractor shall provide a camera-ready copy and a disk copy (or other electronic storage media, such as a flash drive) in a format that enables the material to be uploaded onto the INTERNET.

Deliverables: Various outreach materials for preparation of up to 3 fact sheets, 4 posters, and 4 project websites

Task 3: Support for Surveillance Monitoring of Pharmaceuticals in U.S. Rivers

The contractor shall provide support to characterize baseline levels of pharmaceuticals in U.S. rivers to assist EPA in identifying threats that this toxic metal may pose to the quality and

security of water resources important for human health, including quality of source waters for drinking water and level of contamination in fish species commonly consumed by humans. Support for this task will focus on analysis of fish tissue samples collected for the National Rivers and Streams Assessment (NRSA). Contractor support for this task will consist of a broad range of activities related to analysis of urban river fish tissue samples for pharmaceuticals, including laboratory services support, data review and other QA support, database and data management support, and data reporting. Specific activities to be performed under this task are described in sub-tasks 3.1 through 3.4.

3.1 Laboratory Services Support

The contractor shall provide technical and logistical support for planning, obtaining, coordinating, and monitoring laboratory services for analysis of approximately 163 NRSA urban river fillet tissue samples for pharmaceuticals. This support will include defining laboratory requirements, preparing and distributing an analytical statement of work (SOW) to qualified laboratories, evaluating responses to the SOW to obtain laboratory services from an experienced laboratory with demonstrated technical qualifications and the capability to meet EPA specifications for pharmaceutical reporting limits (as applicable), coordinating shipment of the fish tissue samples for analysis, developing formats for data reporting, and maintaining continuous oversight of laboratory work performance.

The contractor shall define laboratory requirements for pharmaceutical analysis of NRSA urban river fillet tissue samples to achieve consistency with method requirements (as applicable) and levels of detection and quantitation consistent with pharmaceutical analysis reporting limits for target chemicals also included in the PPCP Fish Pilot Study. Target chemicals for analysis of NRSA fish tissue samples for pharmaceuticals will consist of Groups 1 and 5 identified in EPA Method 1694.

The contractor shall prepare the SOW for analysis of NRSA fish tissue samples for pharmaceuticals using the same format and type/level of detail of information applied in the development of the SOW for PCB analysis of GLHHFTS fish tissue samples under Task 1 of WA1-23. The contractor, in accordance with their own internal procurement procedures, shall use available information or contact laboratories directly to identify laboratories qualified to respond to the SOW. Prior to distributing the SOW, the contractor shall provide an electronic copy of the draft SOW for EPA WAM review.

The contractor shall coordinate shipment of NRSA fish tissue samples to the laboratory designated for pharmaceutical analysis. The contractor shall pack the NRSA fish tissue samples following the same procedures used in WA1-23 for shipment of Great Lakes fish tissue samples for PCB analysis, prepare shipping documentation and transport coolers containing the fish tissue samples to an overnight delivery service, track the progress of the fish tissue sample shipment, contact the overnight delivery service immediately to resolve any problem that develops during shipment of the samples, notify the EPA WAM within 24 hours about the problem and its resolution, confirm receipt of sample shipment with the laboratory, and report

any sample condition issues to the EPA WAM within 24 hours after the laboratory has inspected the coolers.

The contractor shall develop formats for reporting NRSA pharmaceutical tissue data that are consistent with requirements in the NRSA urban rivers analytical activities QAPP and will facilitate application of manual and automated review procedures developed for review of target chemical data generated for the National Lake Fish Tissue Study.

The contractor shall maintain continuous oversight of laboratory work performance, tracking compliance with technical and QA requirements and adherence to the data delivery schedule. The contractor shall notify the EPA WAM within 24 hours if any problems develop with quality or timeliness of work being performed by the laboratory designated for mercury analysis and initiate corrective actions to address the problem. Corrective actions for quality issues will be specified in the revised NRSA urban river analytical activities QAPP.

Deliverables: Draft pharmaceutical analysis SOW, Release of pharmaceutical analysis solicitation package for bid, Fish tissue sample shipment

3.2 Data Review and Other QA Support

The contractor shall apply manual and automated systems for qualitative and quantitative review of analytical and quality assurance/quality control (QA/QC) data generated by the analytical laboratory during analysis of the NRSA urban river fish tissue samples for pharmaceuticals. The contractor shall review the data for completeness, accuracy, and compliance with QA/QC procedures, acceptance criteria, and reporting requirements specified in the revised NRSA urban river analytical activities QAPP. The contractor shall also validate the quality of the data by evaluating data quality and assigning flags consistent with those used for the National Lake Fish Tissue Study fish tissue data to identify results with potential quality issues. On a monthly basis, the contractor shall prepare and submit a pharmaceutical data review progress report that includes information on receipt of pharmaceutical data from the analytical laboratory and status of contractor review of the data.

The contractor shall provide support for a number of other QA activities, including, but not limited to, preparing pharmaceutical information to add to the NRSA urban river analytical activities QAPP and produce Revision 1 of this PQAPP; compiling pharmaceutical information to incorporate into the NRSA QA report that summarizes results of the NRSA analytical fish tissue data review and describes qualification of any analytical results during the review process; developing materials that describe and document the status of QA activities related to pharmaceutical analysis of NRSA urban river fish tissue samples for EPA management briefings, meeting presentations, annual OST QA reports, and QA audits (if scheduled during the work assignment period of performance); and documenting pharmaceutical QA information to respond to EPA requirements for development of Information Quality Guidelines. The contractor shall prepare pharmaceutical information for incorporation into the NRSA analytical QA report in a format consistent with the format used to present analytical information in the National Lake

Fish Tissue Study analytical QA report unless otherwise specified by the EPA WAM. The National Lake Fish Tissue Study QA report is available online at http://water.epa.gov/scitech/swguidance/fishstudies/overview.cfm. The EPA WAM will specify format and content for development of materials to document other QA activities, as required. For estimating purposes, assume revision of the NRSA urban river analytical activities QAPP to incorporate pharmaceutical information and development of various materials documenting pharmaceutical QA activities for one briefing, two meeting presentations, and the annual OST QA report.

Deliverables: Revision 1 of the NRSA urban river analytical activities QAPP, Pharmaceutical data review monthly progress report, Pharmaceutical information for QA report, Materials documenting pharmaceutical QA activities

3.3 Database and Data Management Support

The contractor shall provide both manual and automated systems to manage NRSA pharmaceutical fish tissue data and related study information. The contractor shall utilize these systems for pharmaceutical data receipt, storage, and retrieval; development and maintenance of a NRSA fish tissue database that incorporates the pharmaceutical data, along with related field and statistical information; sample analysis tracking; development of data files (e.g., statistical analysis files and files for entry into EPA's STORET); and preparation of computerized reports to identify errors, to provide information for management briefings or technical presentations, and to produce data summaries or graphics for a variety of applications.

The contractor shall receive and store NRSA pharmaceutical fish tissue data and related study information, including historical data/information and data/information gathered during this work assignment period of performance. These data will typically be in electronic formats, but some data and study information may be delivered as hard copy. The contractor shall maintain an automated inventory of this data and information and shall provide a secure facility to store data in an organized, retrievable manner.

The contractor shall incorporate the NRSA fish tissue pharmaceutical data into the existing fish tissue database developed to efficiently receive, store, manipulate, and retrieve NRSA field, laboratory, and statistical data and project information related to analysis of fish tissue samples for target chemicals. In incorporating the pharmaceutical data into the NRSA fish tissue database, the contractor shall provide technical support that includes, but is not limited to, testing of database functionality, integration of electronic data from multiple sources, testing for data completeness and accuracy, retrieval of data for a variety of uses (e.g., preparation of data files in a user-friendly format, such as Excel, for responses to data requests), tracking and maintenance of information, reporting of results, documentation of database structure and content, and incorporation of data security measures to maintain the integrity and security of the data.

The contractor shall provide support to respond to requests for pharmaceutical data and related

information. These requests will generally require quick responses within a period of one or two days. For response to requests, the contractor shall retrieve and compile data and other related information, prepare data and related information files in appropriate formats (e.g., Excel and WORD), and distribute the files as directed by the EPA WAM.

Deliverables: Status report on incorporation of pharmaceutical data into NRSA fish tissue database, Responses for up to 3 pharmaceutical data and information requests.

3.4 Data Analysis and Reporting Support

The contractor shall provide support for statistical analysis of NRSA pharmaceutical fish tissue data. The contractor shall prepare the input file for statistical analysis of the NRSA pharmaceutical fish tissue analytical results using the format developed for NRSA fish tissue data files under Task 1 in WA1-21. The contractor shall include pharmaceutical data from all the valid urban river primary probability-based fish tissue samples in this input file. The EPA WAM will provide the master list of valid urban river fish tissue samples collected and analyzed for the NRSA.

The contractor shall provide support to report statistically representative pharmaceutical baseline fish tissue data generated under the NRSA. The contractor shall prepare NRSA pharmaceutical data and related information to incorporate into a variety of technical documents and outreach materials. These documents and outreach materials may include, but are not limited to, technical reports, scientific journal articles, fact sheets, posters, website materials, and presentations for meetings, conferences and press events. The EPA WAM will provide information about agency requirements for publication of technical documents and outreach materials. The contractor shall comply with all the requirements for preparing graphics and text for publication of articles in applicable scientific journals. The contractor shall provide a draft of all data reporting materials (i.e., technical document information and outreach materials) to the EPA WAM for review and approval. The contractor shall prepare the final technical document information and outreach materials based on the WAM's comments on the draft materials.

Deliverables: Draft and final statistical input files for pharmaceutical data, Draft and final pharmaceutical data and information for technical documents and outreach materials

Task 4: General Technical Support for Surveillance Monitoring of Water Resources

The contractor shall provide general technical support for OST surveillance monitoring of water resources for contaminants of concern relative to water quality and security and to human health. This support may include, but is not limited to, the following activities:

- planning for future studies or enhancement of existing studies
- literature searches and other research to support study development and reporting study results
- identification, development, assessment, costing, and tracking of new technologies for sampling and analysis, monitoring, and threat identification and potential impacts

relative to protection of the quality and security of water resources and human health
- coordination, facilitation, and/or performance of technical expert reviews (e.g., draft analytical methods)
- participation on conference calls or webinars and at meetings, workshops, training events, or conferences as technical experts on analytical activities related to existing and future OST studies
- development of technical information in response to EPA management requests to provide support for assessment of project results, articulation of project-specific accomplishments, identification of lessons learned, and various other applications
- attendance at project team meetings, which are generally held quarterly at EPA headquarters
- preparation for final disposition and storage of project data, other project records, and sample archives

The contractor shall perform specific activities for Task 3 as assigned through written technical direction by the EPA WAM. For estimating purposes, assume support for the following activities during the work assignment period of performance:

- planning support for OST participation in the 2013-2014 NRSA
- planning support for new "data mining" project involving existing fish tissue data from OST fish tissue studies
- a literature search for studies related to results for two target chemicals in the NRSA and/or GLHHFTS to support development of journal articles reporting results for those chemicals
- participation as a technical expert on an average of one 90-minute conference call per month
- development of technical information in response to 12 EPA management requests
- attendance at quarterly project team meetings held at EPA headquarters in the Federal Triangle complex
- preparation of National Lake Fish Tissue Study and PPCP Fish Pilot Study project data and other records for final disposition

Deliverables: Various technical support deliverables per technical direction.

V. SCHEDULE/DELIVERABLES

Deliverable	Schedule
Work plan (Task 0)	As per submission requirement in contract
Monthly progress and financial progress reports (Task 0)	As per submission requirement in contract
Fish tissue sample shipments (Task 1.1)	Initiation of shipments as required for conformance with laboratory data delivery schedule
Archived fish tissue sample inventories (Task 1.1)	Within one month of addition or removal of samples from the repository (storage freezer)

Data review monthly progress reports (Task 1.2)	The final day of the month for months where data are delivered and/or reviewed
NRSA and GLHHFTS analytical QA reports (Task 1.2)	Within one month after completion of project-specific QA data reviews
Materials documenting analytical QA activities (Task 1.2)	As directed by the EPA WAM
NRSA and GLHHFTS database development status reports (Task 1.3)	January 31, 2013 and July 31, 2013 for each project-specific database
Database documentation for OST studies (Task 1.3)	As directed by the EPA WAM
Responses to data/information requests for OST studies (Task 1.3)	As directed by the EPA WAM
Draft and final input files for statistical analysis of NRSA and GLHHFTS target chemical data (Task 1.4)	As directed by the EPA WAM
Statistical output file reviews (Task 1.4)	As directed by the EPA WAM
Comparative analyses of target chemical data (Task 1.4)	As directed by the EPA WAM
Technical document materials (Task 2.1)	As directed by the EPA WAM
Outreach materials (Task 2.2)	As directed by the EPA WAM
Draft pharmaceutical analysis SOW (Task 3.1)	As directed by the EPA WAM
Release of pharmaceutical analysis solicitation package for bid (Task 3.1)	Within 5 days after receipt of EPA WAM comments
Fish tissue sample shipment for pharmaceutical analysis (Task 3.1)	Initiation of shipments as required for conformance with laboratory data delivery schedule
Draft and final NRSA urban river analytical activities QAPP Revision 1 (Task 3.2)	As directed by the EPA WAM
Pharmaceutical data review monthly progress report (Task 3.2)	Final day of the month for months where pharmaceutical data are delivered and/or reviewed
Pharmaceutical information for the NRSA QA report (Task 3.2)	Within 1 month after completion of the pharmaceutical data review
Other pharmaceutical QA activity materials (Task 3.2)	As directed by the EPA WAM
Status report on incorporation of pharmaceutical data into NRSA database (Task 3.3)	July 31, 2013
Responses to pharmaceutical data/information requests (Task 3.3)	As directed by the EPA WAM
Draft and final pharmaceutical data analysis input files (Task 3.4)	As directed by the EPA WAM
Draft and final pharmaceutical data and	As directed by the EPA WAM

information for technical documents and outreach materials (Task 3.4)	
General technical support deliverables (Task 4)	As directed by the EPA WAM

VI. REPORTING REQUIREMENTS

Monthly Progress Reports (including a progress evaluation discussion)
Financial Reports
Project Specific QAPP update (if applicable)
Data Review Monthly Progress Reports

VII. GREEN MEETINGS AND CONFERENCES

The contractor shall follow the provision of EPA prescription 1523.703-1, *Acquisition of environmentally preferable meeting and conference services (May 2007),* for the use of off-site commercial facilities for an EPA event, whether the event is a meeting, conference, training session, or other purpose. Environmental preferability is defined at FAR 2.101, and shall be used when soliciting quotes or offers for meeting/conference services on behalf of the Agency.

VIII. CONFERENCE/MEETING GUIDELINES AND LIMITATIONS

The contractor shall immediately alert the EPA WAM to any anticipated event under the work assignment which may result in incurring an estimated $23,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WAM will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

QUALITY ASSURANCE SURVEILLANCE PLAN
for the Water Security Division's
Technical, Analytical, and Regulatory Mission Support
Performance Work Statement

Quality Assurance Surveillance Plan

The requirements contained in this work assignment are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The Work Assignment Manager shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

General Management and Administration			
Performance Requirement	**Measurable Performance Standards**	**Surveillance Methods**	**Incentives/Disincentives**
Management and Communications: The Contractor shall maintain contact with the EPA CO, PO and WAM throughout the performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA WAM. In cases where issues have a direct impact on project schedules or cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules or cost shall be brought to the attention of the appropriate EPA WAM within 3 business days of occurrence.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report) to identify unreported issues. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	**Unsatisfactory** rating under the category of Business Relations in the NIH Performance Evaluation System if two or more incidents occur during an applicable period of performance when the contractor does not meet the measurable performance standards for a given contract period.

Timeliness: Services and deliverables shall be in accordance with schedules stated in each work assignment or tasking document, unless amended or modified by an approved EPA action.	During any period of performance, 90% of all submitted deliverables shall be submitted no later than 5 business days past the due date.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	**Unsatisfactory** rating under the category of Timeliness in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

Cost Management and Control: The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through progress reports and approved special reporting requirements. The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.	The contractor shall manage costs to the level of approved ceiling on the work assignment. The contractor shall notify the WAM/PO when 75% of the approved funding ceiling for the work assignment is reached.	The EPA PO will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment expenditures. The EPA PO shall review the Contractor's monthly progress reports and request the WAMs verification of expenditures and technical progress before authorizing invoice payments.	**Unsatisfactory** rating under the category of Cost Control in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

Technical Effort: The analyses or products developed by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with contract, agency requirements and any additional requirements outlined in individual work assignments or technical directives. Any work requiring the contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the WAM in written technical direction, and should meet the objectives stated in the work assignment. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified. Draft versions of a document shall require no more than two editorial revisions.	EPA will review all analyses and work products conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit. The EPA WAM/TM (Task Manager) will review initial drafts to assess technical accuracy and editorial quality. The WAM/TM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents.	**Unsatisfactory** rating under the category of **QUALITY OF PRODUCT OR SERVICE** in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.

Socio-Economic Utilization: The Contractor shall assess all agency requirements outlined in work assignments for opportunities to fully utilize the knowledge and experience of its socio-economic team members. Work shall be allocated in a manner that ensures the Contractor's annual subcontracting goals are met.	The Contractor shall meet a standard of at least 80% of the dollar goals outlined in their subcontracting plan during each period of performance, unless Agency priorities prevent or preclude such tasking.	EPA will monitor the contractor's utilization of socio-economic firms by reviewing the contractor's submittal of Standard Forms (SF) 294 and (SF) 295.	If less than 80% is reached during an applicable period of performance, the contractor shall outline the steps that will be taken to meet the annual goals outlined in their plan, or provide justification as to the rationale for the lack of meeting the subcontracting plan goals. Performance that does not meet the stated goals without sufficient justification will be reported as an **Unsatisfactory** rating under the category of **BUSINESS RELATIONS**, and **MEETING SDB SUBCONTRACTING REQUIREMENTS** in the NIH Performance Evaluation System.

EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 2-21

☐ Other ☒ Amendment Number: 000001

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-C-10-060	11/30/2010 To 07/31/2013 Base Option Period Number 2	COC Analysis Support

Contractor: COMPUTER SCIENCES CORPORATION

Specify Section and paragraph of Contract SOW: 2.8, 2.15, 2.17, 3.1.4, 3.1.5, 3.1.17

Purpose:
- ☐ Work Assignment
- ☒ Work Assignment Amendment
- ☐ Work Plan Approval
- ☐ Work Assignment Close-Out
- ☐ Incremental Funding

Period of Performance: From 08/01/2012 To 07/31/2013

Comments:
This action adds Task 5, shifts effort from Task 3, and requests a correct alignment of ODCs. Provide revised work plan for amended portion, revised overall budget, and summary of shift of cost estimate by task. Agency estimates current workplan costs and hours will be sufficient to support the task, but will review that when amendment workplan and budget are received.

☐ Superfund — Accounting and Appropriations Data — ☒ Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (*Max 2*) ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:	Cost/Fee:	LOE:
11/30/2010 To 07/31/2013		
This Action:		
Total:		

Work Plan / Cost Estimate Approvals

	Cost/Fee:	LOE:
Contractor WP Dated:		
Cumulative Approved:		

Work Assignment Manager Name: Leanne Stahl (Signature) (Date)	Branch/Mail Code: Phone Number: 202-566-0404 FAX Number:
Project Officer Name: Nancy Muzzy (Signature) (Date)	Branch/Mail Code: Phone Number: 513-569-7864 FAX Number:
Other Agency Official Name (Signature) (Date)	Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: Cathy Basu (Signature) (Date)	Branch/Mail Code: Phone Number: 513-487-2042 FAX Number:

WORK ASSIGNMENT
PERFORMANCE WORK STATEMENT

Contract No. EP-C-10-060
Work Assignment: 2-21, amendment 1
WAM: Leanne Stahl
OW/Office of Science and Technology
Standards and Health Protection Division
Phone: (202) 566-0404
FAX: (202) 566-0409
E-mail: stahl.leanne@epa.gov
Mail code: 4305T
1200 Pennsylvania Ave., NW
Washington, DC 20460

LOE: 2070 hours (unchanged)

Period of Performance: August 1, 2012 to July 31, 2013

Title: Contaminant of Concern Analysis Support for Water Quality and Security Assessment

PWS Sections: 2.8, 2.8.1, 2.8.3., 2.8.4, 2.15, 2.16, 2.17, 3.1.4, 3.1.5, 3.1.13, 3.1.17, 3.1.18

I. PURPOSE:

The purpose of this work assignment is to revise the scope of effort required, and realign costs associated with the requirements. Task 3 is no longer a priority for the Agency, and effort associated with it should be replaced with newly added Task 5. The revision is as follows:

IV. DETAILED TASK DESCRIPTION:

The contractor shall perform the following tasks:

Task 0: Work Plan, Progress Evaluations, and Monthly Progress Reports

Task unchanged
Task 1: Support for Surveillance Monitoring of Contaminants of Concern in U.S. Waters

Unchanged

Task 2: Support for Reporting Water Resource Surveillance Monitoring Study Results

Unchanged

Task 3: Support for Surveillance Monitoring of Pharmaceuticals in U.S. Rivers

This task is no longer a priority, and only effort already performed will be needed. No further effort on this task should be undertaken by the contractor.

Task 4: General Technical Support for Surveillance Monitoring of Water Resources

Task 4 is unchanged, however, ODC's for pharm analysis which was incorrectly listed in the work plan and cost budget should have been properly listed for Task 3, shall now be shifted to support our newly added task.

Task 5: 2013 National Rivers and Streams Assessment

The contractor shall provide support to characterize trends in the levels of mercury and other contaminants of concern in U.S. rivers and streams that may adversely impact the quality and security of water resources important for human health, including the quality of source waters for drinking water and the level of contamination in fish species commonly consumed by humans. Support for this task shall focus on providing supplies for shipping fish samples collected for EPA's 2013 National Rivers and Streams Assessment (NRSA), shipping fish sampling supplies to the NRSA field sampling supply distribution center and fish samples from field locations to a laboratory designated for interim storage or for fish sample preparation, obtaining the services of and monitoring the performance of a laboratory to prepare fish tissue samples, reviewing quality control (QC) and other data related to fish tissue sample preparation, and distributing fish tissue samples (e.g., plugs of muscle tissue) to designated analytical laboratories. EPA plans to analyze fillet tissue samples for mercury and other contaminants of concern, such as perfluorinated compounds (PFCs), polychlorinated biphenyls (PCBs), and polybrominated diphenyl ethers (PBDEs). Specific activities to be performed under this task are described in two sub-tasks below, including field sampling support (sub-task 5.1) and fish sample preparation support (sub-task 5.2).

5.1 Field Sampling Support

The contractor shall provide supplies for shipping 2013 NRSA fish samples from field locations in all of the lower 48 states to a laboratory designated for interim fish sample storage or for fish sample preparation. Supplies for shipping fish samples shall consist primarily of sheets of solvent-rinsed foil used to wrap individual fish in the fish composite samples (which usually contain five fish) and dry ice for preserving the fish samples during shipment. In addition, the

contractor may be required to provide up to 20 coolers for shipment of whole fish samples from field locations to the fish sample preparation laboratory or other designated location for interim storage.

The contractor shall obtain and monitor laboratory services to prepare and deliver up to 2500 sheets of solvent-rinsed foil using the same foil preparation protocols (e.g., foil sheet dimensions, type of solvent, solvent-rinsed foil baking temperature and duration, folding and bagging procedures for the treated sheets of foil, etc.) as applied for the Great Lakes Fish Monitoring Program.

The contractor shall provide a mechanism for 2013 NRSA field crews to obtain dry ice for shipping whole fish tissue samples to designated laboratories. Shipping protocols specify using 50 pounds of dry ice per cooler for shipment of fish composite samples. The EPA WAM will provide a list of field crews that will require dry ice. EPA anticipates the need to supply sufficient dry ice (allowing for sublimation of dry ice prior to packing fish composite samples in coolers for shipment) for shipping up to 100 coolers of fish samples during the remaining contract period of performance.

The contractor shall obtain up to 20 coolers to increase the existing cooler supply for shipping NRSA whole fish composite samples or to replace existing fish sample coolers that become damaged in the field or during shipment. The contractor shall provide coolers of the same brand, color, and size as the coolers currently in use for transporting and shipping the 2013 NRSA fish samples. The EPA WAM will provide cooler specifications to the contractor.

The contractor shall provide shipping support for NRSA fish sampling supplies and fish samples. NRSA fish sampling supplies shall be organized into individual whole fish tissue sampling kits, packed into coolers (one sampling kit per cooler), sealed with tape and a custody seal, and shipped to the NRSA field sampling supply distribution center in Traverse City, Michigan. Each sampling kit shall include a pre-addressed shipping bill for overnight delivery of fish samples with the "Sender" information left blank for the field crew to complete when they have a fish sample ready to ship back in the cooler. The EPA WAM will provide the name and address of the supply coordinator at the distribution center. There will be up to 240 coolers with fish sampling kits to ship to the distribution center and the combined weight of a cooler and fish sampling kit is about 15.5 lbs. The contractor shall consider time available for supply cooler delivery and estimated cost for delivery to determine the most appropriate shipping option (e,g., ground transportation or air delivery). The contractor shall track progress of supply shipments and report interim shipping status (if problems develop during shipment) or final delivery information (for routine deliveries) to the EPA WAM.

The contractor shall be responsible for providing shipping support to transport 2013 NRSA fish samples via overnight delivery from locations in the field or temporary storage facilities to designated laboratories. Until the contractor secures a fish sample preparation laboratory, the fish samples shall be shipped to EPA's fish tissue storage facility at Microbac Laboratories in Baltimore, Maryland. The contractor shall also be responsible for re-shipping the fish samples

delivered to the Baltimore fish tissue sample storage facility to the fish sample preparation laboratory when it becomes available. The contractor shall track all shipments of fish samples and use information from the sample tracking form provided by EPA to track the fish samples shipped by field crews. The contractor shall report progress of each fish sample shipment initiated by NRSA field crews or by the contractor (i.e., re-shipment of fish samples from the temporary storage facility in Baltimore to the fish sample preparation laboratory), including notifying the EPA WAM of any shipping problems when they arise and providing the cooler delivery date to the EPA WAM once confirmation of delivery is available from the overnight delivery service. The contractor shall also notify the EPA WAM about the condition of each fish sample within 24 hours after fish sample delivery.

5.2 Fish Sample Preparation Support

The contractor shall conduct a range of activities to support 2013 NRSA fish sample preparation, including activities related to the following broad areas of support:

- obtaining the services of a fish preparation laboratory
- preparing a QAPP for laboratory preparation of fish tissue samples
- planning and conducting training for the fish sample preparation laboratory
- monitoring laboratory performance

The contractor shall obtain the services of a laboratory with experience in fish sample preparation to prepare fish tissue samples for chemical analysis from NRSA whole fish composite samples. The contractor shall develop a laboratory statement of work (SOW) that incorporates the same requirements and protocols used for fillet tissue composite sample preparation during the Great Lakes Human Health Fish Tissue Study. In addition, there is a new set of NRSA requirements and protocols for extraction of a single dorsal muscle plug sample from each of two fish specimens in every whole fish composite sample prior to preparing the fillet tissue composite samples for chemical analysis. The EPA WAM will provide the contractor with an electronic copy of the new plug sample requirements and protocols. The EPA WAM will also provide fish sample preparation instructions for each whole fish composite sample that specify which two fish the laboratory should extract the plug samples from and which fish the laboratory should process to produce the fillet composite samples (i.e., scaling the fish, removing skin-on fillets with bellyflaps from both sides of each fish, homogenizing all the fillet tissue to a fine, well-blended consistency, and preparing tissue aliquots specified by the EPA WAM for chemical analysis and for archiving). The contractor shall incorporate these new plug sampling requirements and protocols into the laboratory SOW, including the requirements for shipping plug samples to designated analytical laboratories. EPA will provide the supplies necessary for extraction of fish plug samples (e.g., biopsy punches and vials for plug sample shipment). The SOW shall also specify preparation of fillet tissue aliquots for mercury, PFC, PCB, and PBDE analysis, in addition to tissue aliquots for archiving. Prior to distributing the

SOW, the contractor shall provide an electronic copy of the draft SOW for EPA WAM review. The contractor shall also be responsible for using a competitive process to obtain fish sample preparation laboratory services, including distributing the SOW to qualified laboratories, evaluating responses to the SOW to secure laboratory services from an experienced laboratory with demonstrated technical qualifications to meet the NRSA fish sample preparation requirements, and reporting the results of the competitive process to the EPA WAM.

Prior to the laboratory initiating preparation of any NRSA fish tissue samples, the contractor shall develop a quality assurance project plan (QAPP) for fish sample preparation. In preparing this QAPP, the contractor shall follow current EPA guidance for QAPP development. The contractor shall prepare a draft QAPP for EPA WAM review and incorporate EPA WAM comments on the draft QAPP to produce the draft final QAPP for review by the EPA WAM and other individuals designated for QAPP approval. The Contractor shall produce the final NRSA fish sample preparation QAPP based on final comments from the EPA WAM who will compile and forward comments from all the reviewers/approvers. The contractor shall prepare and deliver electronic copies of the final QAPP in two formats, WORD and PDF. The EPA WAM will circulate the final QAPP for approval and forward a signed copy of the QAPP to the Project Officer.

The contractor shall plan and conduct training at the laboratory selected for fish sample preparation prior to the laboratory initiating preparation of any NRSA fish tissue samples. This training shall be modeled on the fish sample preparation training developed for the Great Lakes Human Health Fish Tissue Study with the addition of training elements for the new plug sampling requirements. The contractor shall plan for one day of training that includes presentation of training materials, a hands-on demonstration of fish sample preparation techniques by a senior fisheries biologist provided by EPA, and laboratory staff demonstration of the fish sample preparation techniques with coaching available as required. The contractor shall develop a training agenda and draft training materials for EPA WAM review. The contractor shall prepare the final agenda and training materials based on comments from the EPA WAM. The contractor shall be responsible for shipping or transporting the training materials to the laboratory and for ensuring that the laboratory has all the necessary supplies, equipment, and laboratory staff designated for fish sample preparation available on the date scheduled for training. Prior to the training, the contractor shall require the laboratory staff to verify that the fish sample preparation equipment is operating properly. EPA anticipates that the onsite NRSA fish sample preparation training will be a team effort that involves the CSC work assignment leader, the senior fisheries biologist, and the EPA WAM. The contractor shall develop training cost estimates, including travel and other training-related expenses, based on the location of a qualified laboratory likely to respond to the SOW.

Once the QAPP is approved and the training is completed, the contractor shall notify the fish sample preparation laboratory that it can begin fish sample preparation. The contractor shall be responsible for maintaining continuous oversight of laboratory work performance, including tracking compliance with technical and quality assurance/quality control (QA/QC) requirements and adherence to the delivery schedule for fish tissue samples. As part of the laboratory

performance monitoring effort, the contractor shall require the laboratory to prepare and submit weekly progress reports for fish tissue sample preparation with content and format consistent with the fish sample preparation weekly progress reports submitted for the Great Lakes Human Health Fish Tissue Study for fillet tissue samples and new content specified by the EPA WAM for plug samples (e.g., individual plug sample weights, along with the specimen number, length, and weight for the fish each plug sample was extracted from). The contractor shall require that the laboratory submit these reports no later than the Tuesday following the close of the previous week's fish sample preparation activities. The contractor shall forward the weekly progress reports to the EPA WAM by COB of the report due date. The contractor shall review the weekly progress reports using the process developed for the Great Lakes Human Health Fish Tissue Study, including verifying that appropriate amounts of fish tissue were measured and stored for each fillet tissue aliquot, and forward results of that review to the EPA WAM. The contractor shall also review the fish sample preparation QC data associated with each batch of fish tissue samples and report any data that do not meet the QC acceptance criteria to the EPA WAM as soon as the review of each set of data is complete. The contractor will be responsible for contacting the laboratory about any issues identified from review of the weekly progress reports and the QC data and for achieving timely issue resolution.

V. SCHEDULE/DELIVERABLES Leanne – address the changes in the delivery chart…

Deliverable	Schedule
Work plan (Task 0)	As per submission requirement in contract
Monthly progress and financial progress reports (Task 0)	As per submission requirement in contract
Fish tissue sample shipments (Task 1.1)	Initiation of shipments as required for conformance with laboratory data delivery schedule
Archived fish tissue sample inventories (Task 1.1)	Within one month of addition or removal of samples from the repository (storage freezer)
Data review monthly progress reports (Task 1.2)	The final day of the month for months where data are delivered and/or reviewed
NRSA and GLHHFTS analytical QA reports (Task 1.2)	Within one month after completion of project-specific QA data reviews
Materials documenting analytical QA activities (Task 1.2)	As directed by the EPA WAM
NRSA and GLHHFTS database development status reports (Task 1.3)	January 31, 2013 and July 31, 2013 for each project-specific database
Database documentation for OST studies (Task 1.3)	As directed by the EPA WAM
Responses to data/information requests for OST studies (Task 1.3)	As directed by the EPA WAM
Draft and final input files for statistical analysis of NRSA and GLHHFTS target	As directed by the EPA WAM

chemical data (Task 1.4)	
Statistical output file reviews (Task 1.4)	As directed by the EPA WAM
Comparative analyses of target chemical data (Task 1.4)	As directed by the EPA WAM
Technical document materials (Task 2.1)	As directed by the EPA WAM
Outreach materials (Task 2.2)	As directed by the EPA WAM
General technical support deliverables (Task 4)	As directed by the EPA WAM
Fish sampling supplies (Task 5.1)	As directed by the EPA WAM
Draft fish sample prep SOW (Task 5.2) Final fish sample prep SOW (Task 5.2)	3 days after WA amendment is issued 2 days after receipt of EPA WAM comments
Draft fish sample prep QAPP (Task 5.2) Final draft fish sample prep QAPP (Task 5.2) Final fish sample prep QAPP (Task 5.2)	May 31, 2013 3 days after receipt of EPA WAM comments 3 days after receipt of EPA WAM comments
Draft fish sample prep training agenda and training materials (Task 5.2) Final fish sample prep training agenda and training materials (Task 5.2)	3 weeks prior to scheduled training date 2 days after receipt of EPA WAM comments
Fish sample prep weekly progress reports (Task 5.2)	Tuesdays following each week that the lab completes fish sample preparation activities

The Agency anticipates shifted resources from deleted Task 3 and realigned ODCs from Task 4 will be sufficient to support the newly added Task 5, but will review the estimated costs when the revised budget is submitted. The Contractor shall provide a revised budget with the amended work plan..

ALL OTHER ASPECTS OF THE WORK ASSIGNMENT 2-21 REMAIN UNCHANGED.

QUALITY ASSURANCE SURVEILLANCE PLAN
for the Water Security Division's
Technical, Analytical, and Regulatory Mission Support
Performance Work Statement

Quality Assurance Surveillance Plan

The requirements contained in this work assignment are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The Work Assignment Manager shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

General Management and Administration			
Performance Requirement	**Measurable Performance Standards**	**Surveillance Methods**	**Incentives/Disincentives**
Management and Communications: The Contractor shall maintain contact with the EPA CO, PO and WAM throughout the performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA WAM. In cases where issues have a direct impact on project schedules or cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules or cost shall be brought to the attention of the appropriate EPA WAM within 3 business days of occurrence.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report) to identify unreported issues. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	**Unsatisfactory** rating under the category of Business Relations in the NIH Performance Evaluation System if two or more incidents occur during an applicable period of performance when the contractor does not meet the measurable performance standards for a given contract period.

Timeliness: Services and deliverables shall be in accordance with schedules stated in each work assignment or tasking document, unless amended or modified by an approved EPA action.	During any period of performance, 90% of all submitted deliverables shall be submitted no later than 5 business days past the due date.	100% of active work assignments under the contract will be reviewed by the EPA WAM monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved. The EPA WAM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	**Unsatisfactory** rating under the category of Timeliness in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

Cost Management and Control: The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through progress reports and approved special reporting requirements. The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.	The contractor shall manage costs to the level of approved ceiling on the work assignment. The contractor shall notify the WAM/PO when 75% of the approved funding ceiling for the work assignment is reached.	The EPA PO will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment expenditures. The EPA PO shall review the Contractor's monthly progress reports and request the WAMs verification of expenditures and technical progress before authorizing invoice payments.	**Unsatisfactory** rating under the category of Cost Control in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

Technical Effort: The analyses or products developed by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with contract, agency requirements and any additional requirements outlined in individual work assignments or technical directives. Any work requiring the contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendation and all other options and recommendations considered.	All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the WAM in written technical direction, and should meet the objectives stated in the work assignment. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified. Draft versions of a document shall require no more than two editorial revisions.	EPA will review all analyses and work products conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit. The EPA WAM/TM (Task Manager) will review initial drafts to assess technical accuracy and editorial quality. The WAM/TM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents.	**Unsatisfactory** rating under the category of **QUALITY OF PRODUCT OR SERVICE** in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.

Socio-Economic Utilization: The Contractor shall assess all agency requirements outlined in work assignments for opportunities to fully utilize the knowledge and experience of its socio-economic team members. Work shall be allocated in a manner that ensures the Contractor's annual subcontracting goals are met.	The Contractor shall meet a standard of at least 80% of the dollar goals outlined in their subcontracting plan during each period of performance, unless Agency priorities prevent or preclude such tasking.	EPA will monitor the contractor's utilization of socio-economic firms by reviewing the contractor's submittal of Standard Forms (SF) 294 and (SF) 295.	If less than 80% is reached during an applicable period of performance, the contractor shall outline the steps that will be taken to meet the annual goals outlined in their plan, or provide justification as to the rationale for the lack of meeting the subcontracting plan goals. Performance that does not meet the stated goals without sufficient justification will be reported as an **Unsatisfactory** rating under the category of **BUSINESS RELATIONS**, and **MEETING SDB SUBCONTRACTING REQUIREMENTS** in the NIH Performance Evaluation System.